CAPSULE SUMMARY OF ACTIVE TASKS

July 1, 2006

UNITED STATES MEMBER STATE SUPPORT PROGRAM TO IAEA SAFEGUARDS

DEPARTMENT OF ENERGY
DEPARTMENT OF STATE
NUCLEAR REGULATORY COMMISSION
DEPARTMENT OF DEFENSE

INTERNATIONAL SAFEGUARDS PROJECT OFFICE BROOKHAVEN NATIONAL LABORATORY UPTON, LONG ISLAND, NEW YORK 11973

Currently Active Tasks

		Ouri	citily Active 1a	SKS	
	Title				
TaskID	Subtas [Agency# / Task Officer]	Organizatio	Total Budget	Total Spent	Comments
A.116	Field Support Instruments and Techniq	· ·			
7	[USA A 931 / R. Carchon]	400			
	A.116.83	LANL	\$248,000.00	\$246,413.0	0
	A.110.03	LAINE	\$240,000.00	Ψ240,413.0	Cascade Header Enrichment Monitor (CHEM) - This subtask may be
					closed when the IAEA confirms that the deliverable is acceptable.
A 202	Compartion of Phytonium Instance for th	a Duadwetian of			diosed when the 1/12/1 committee that the deliverable is acceptable.
A.202	Separation of Plutonium Isotopes for th High Purity Spike Reference Materials	e Production of			
	[USA A 909 / D. Donohue]				
	[GOX 7, GOO 7 D. Dollollag]	LANL	\$17,100.00	\$17,100.0	n
		LAINE	ψ17,100.00	ψ17,100.0	There was no activity planned for this quarter.
		NBL	\$147,225.00	\$76,270.0	,
		INDL	\$147,225.00	\$70,270.0	NBL reviewed proposals and communicated with ISPO/POTAS. Steven
					Goldberg (NBL) has begun to brief Stephan Vogt, a technical expert
					from the IAEA, on the current status of the project. Mr. Vogt has been
					assigned recently to NBL and will serve as analyst and leader of this
					project. A preliminary project plan is expected by the end of 2006.
		ORNL	\$101,612.00	\$101,612.0	0
					The funding for this task was redirected to Task B.082. The remaining
					activity on this task is the shipment of the production portion (4.5g) of
					the FP-33 to the IAEA. The IAEA will notify ORNL when the shipment
					should occur, which will probably be no earlier than December 2006.
A.218	Controlled Potential Coulometry of 1 mg	g Pu with SRL			
	Coulometer				
	[USA A 1049 / S. Balsley]				
		SRNL	\$363,023.00	\$282,103.0	0
					Savannah River Site (SRS) staff visited the IAEA Safeguards Analytical
					Laboratory (SAL) in Seibersdorf, Austria, from June 19 through June 23,
					2006, to complete scheduled maintenance on the SRS-built
					controlled-potential coulometer and measurement cell. The system was found to be in good working order.
4 000	NDAY 15 (1 T I I C DDN E				was found to be in good working order.
A.233	NDA Verification Techniques for BRN E Plant	nrichment			
	[USA A 1157 / R. Lafolie]				
	[OOA A 1107 / IV. Latotte]	ORNL	\$561,870.00	\$561,870.0	0
		ORNL	φυσ1,010.00	φυσ1,070.0	
					This task is on stand by.

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TaskID A.241	Title Subtas [Agency# / Task Officer] Development of Integrated Review Software for [USA A 1238 / C. Liguori]	Organizatio or UMS	Total Budget	Total Spent Comments
	[COXXX 1200 / O. L.igue.i.]	LANL	\$402,000.00	\$344,226.74
		27 1142	Ψ+02,000.00	LANL Integrated Review Software (IRS) - Generic definitions and interfaces for analysis and import COM libraries were updated.
	A.241.01	LANL	\$168,870.00	\$59,568.74
				Adoption of Operator Provided Declarations (OPD) Data into Generic Software - The requirements document has been reviewed by the IAEA and approved. Work may proceed on the OPD software. A software design document will be completed and sent to the IAEA. Actual software development will commence in August. The OPD software is planned to be released with the baseline 3 delivery in early 2007.
	A.241.02	LANL	\$123,000.00	\$38,328.49
				Prototype Analysis Module - There has been no activity reported for this quarter.
	A.241.03	LANL	\$27,000.00	\$4,986.00
				Implementation of VXI Integrated Fuel Monitor (VIFM) Analysis - This task involves support to the IAEA to integrate the VIFM Analysis COM written by the IAEA. There has been no activity reported for this quarter.
	A.241.04	LANL	\$74,000.00	\$3,844.00
				Integrated Review Software (IRS) Upper Layer Redesign and Standardization - There has been no activity reported for this quarter.
A.242	Evaluation of Miniature GRAND Electronic Un [USA A 1239 / Y. Lee]	iit		
	A.242.02	LANL	\$220,000.00	\$206,889.00
				MiniGRAND Commercialization - Some of the Mini Gamma Ray and Neutron Detectors (MiniGRAND) designed by LANL are experiencing problems when operating in an elevated humidity environment. LANL is waiting for a follow-on letter request from the IAEA to continue the MiniGRAND humidity diagnosis in order to identify positively the causes of unsatisfactory performance and to identify all corrective actions needed to be implemented to ensure satisfactory MiniGRAND performance.
	A.242.06	LANL	\$714,000.00	\$628,697.00
				MiniGRAND Microprocessor Board (MPB) Upgrade - LANL is waiting for IAEA to purchase six MPBs from Canberra Albuquerque. LANL and IAEA will receive three MPBs each for evaluation and testing, when these MPBs are produced.
	A.242.09	LANL	\$19,000.00	\$17,384.00
				MiniGRAND and Auxiliary Communication Device (ACD) Testing - LANL is waiting for IAEA to submit a letter request for work completed at LANL which supported the Mini Analog to Digital Converter (MiniADC) testing.

	Title				
TaskID A.247	Subtas [Agency# / Task Officer] Support for the Development of the S Rokkasho Reprocessing Plant [USA A 1351 / C. Creusot]	Organizatio SG System at	Total Budget	Total Spent	Comments
	A.247.05	LANL	\$814,000.00	\$766,309.93	
				 	Rokkasho Reprocessing Plant (RRP) Integration of Inspection Equipment - The Temporary Canister Verification System (TCVS) detector has been installed successfully at RRP in Japan. Some additional electronics modules are required to be fabricated for the IAEA cabinets. The next stage in this task is to support the calibration of TCVS planned for this fall.
	A.247.09	LANL	\$176,000.00	\$172,743.75	j
					RRP Project Coordination - This subtask provides LANL with funding for regular reporting to the IAEA on all LANL Rokkasho Reprocessing Plant (RRP) work. This subtask is in progress.
	A.247.18	LANL	\$191,000.00	\$105,607.31	
				; ; ; ; ; ; ;	Stand-Alone Integrated Review Software (IRS) and Training - This subtask concerns the provision of an IRS based on the generic LANL software but tailored for use at RRP. This system is intended to be used as an interim and backup review system to the Integrated Inspector Information System (I3S). LANL visited the RRP inspectors' office in March 2006. The software appeared to be operating successfully. The first measurement with the WCAS-A detector on real waste has been performed at RRP. The data will be studied in order to determine the best method for presenting the results to the inspector. The software will not be fully operational until after the calibration exercises have been carried out on the Non Destructive Assay systems, which are the Temporary Canister Verification System and the improved Plutonium Canister Assay System. These calibration exercises are planned tentatively for the fall of 2006.
	A.247.19	LANL	\$960,500.00	\$546,262.56	
				(() (UNARM Tool COM Support for NDAR - This subtask involves the conversion of existing LANL software to component object modules (COMs) to support the Non Destructive Assay Review (NDAR) system at RRP. During a May meeting between LANL and the IAEA in Vienna, it was agreed that LANL would accelerate their delivery schedule by providing relatively untested "beta" COMs to the IAEA and their NDAR contractor (Furiware) throughout lune and luly. This will allow Euriware

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contractor (Euriware) throughout June and July. This will allow Euriware to continue working, instead of waiting for formally tested components. A meeting at LANL with Euriware and the IAEA is scheduled for July to test jointly all LANL COMs.

	Title				
TaskID	Subtas [Agency# / Task Officer] A.247.20	Organizatio LANL	Total Budget \$109,000.00	Total Spent \$14,423.88	Comments
				calibration Assay Sys (DCPD), an System (M material pr have beer for this wo in the MOX	of Safeguards Equipment at RRP - This subtask involves the of three RRP systems: the Improved Plutonium Canister tem (iPCAS), the Directional Canister Passage Detector and the Mixed Oxide Storage Containment and Surveillance SCS). The calibrations will be done as RRP radioactive ogresses through the facility. Some Monte Carlo calculations a carried out on a model of the as-built detector, in preparation rk. These were necessary to establish the effect of moisture a powder on the response of the detector and to obtain the stor the moisture correction algorithm.
A.248	Gate Monitor at LWRs Loaded with MO	X Assemblies			
	term contract, and contract	LANL	\$330,000.00	\$305,571.33	
				The calibra and proced	Gate Monitor will be calibrated before shipment to Vienna. ation will be performed using the N-1 radium source. Facility dural requirements for the use of the source at N-1 have been June 2006.
A.250	Enhanced ANM Capability for HKED So [USA A 1369 / N. Doubek]	ftware at SAL			
	A.250.01	LANL	\$165,000.00	\$165,203.00	
				Laboratory performing	are was provided to the IAEA at the Safeguards Analytical for use by expert Hybrid K-Edge Densitometry users in non destructive assay of Special Nuclear Material Solutions. ISK is closed. IAEA has submitted a letter request for a ubtask.
A.251	Expert - Instrumentation Systems				
	[USA E 1372 / M. Aparo]	OFF	ΦΕΕΟ 004 CC	\$500.047.45	
		CFE	\$550,001.66		big completed his cost-free expert assignment at the IAEA in task is closed.
	A.251.02	Aquila	\$85,500.00	\$0.00	
				June for th remote mo	Chernobyl Installation - James Halbig traveled to Vienna in ree weeks to prepare for the installation of the unattended nitoring system at Chernobyl unit 4. Dr. Halbig will travel with a Chernobyl in July to assist in the installation.

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	Title			
TaskID A.252	Subtas [Agency# / Task Officer] Field Support and Implementation [USA A 931 / R. Carchon]	Organizatio	Total Budget	Total Spent Comments
	A.252.14	LANL	\$146,000.00	\$124,984.74
				FDMS and RR Codes - There has been no activity reported for this quarter.
	A.252.16	LANL	\$34,500.00	\$34,500.00
				Recalibration of the Hulls Measurement and Monitoring System (HMSS) ISPO is waiting for the IAEA to accept the final report.
	A.252.19	ORNL	\$78,000.00	\$55,077.00
				ORIGEN Evolution Code Development for Safeguards - Two-dimensional models were developed to simulate fuel burnup in a typical RBMK-1000 assembly, following a review of available RBMK data. Preliminary checks on the validity of the approach have been conducted by comparing nuclide-concentration predictions for fifteen samples obtained from fuel rods from a number of RBMK-1000 assemblies. Concentration measurements for these samples were carried out at the Khlopin Radium Institute. These preliminary comparisons between measurements and predictions show reasonable agreement. The RBMK-1000 SCALE models will be used for library development. Comparison and library preparation work is continuing.
	A.252.20	LANL	\$28,000.00	\$25,849.92
				Pre-assignment Support from Anthony Belian - On April 18, 2006, the SSTS approved funding for Anthony Belian (LANL) for travel to Vienna that took place from May 4 to May 18. Mr. Belian, who is currently employed at LANL, has been selected for a P4 position in the NDA Unit in the Section for NDA and Seals, Division of Safeguards Technical Support. The purpose of the working period is to allow Dr. Belian the opportunity to overlap with his predecessor. This task is complete.
	A.252.21	ORNL	\$36,000.00	\$9,928.00
				Implementation of the Multi-Group Beta Ray Calculation System BETA-S-3.1 in the ORIGEN ARP Package - ORNL is upgrading the BETA-S-3.1 module in SCALE 5 (a reactor code that includes spent fuel characterization) to aid in developing numerical models of the Cerenkov light produced by secondary beta particles traveling through water in spent fuel storage ponds. Then, this information can be processed by another numerical code to perform the transport and evaluation of the location and intensity of the Cerenkov light production. Developing such a tool could be applied in predicting relative change in the Cerenkov glow due to pins removal/substitution and can be applied to interpreting the image recorded by the Digital Cerenkov Viewing Device (DCVD).

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Viewing Device (DCVD).

TaskID A.258	Title Subtas [Agency# / Task Officer] Detection System for In Situ Measurement Signatures from Spent Fuel Storage Control		Total Budget	Total Spent	Comments
	[USA A 1434 / Y. Lee]				
	[OOA A HOTT II ZOO]	LANL	\$180,000.00	r a c l fi	This task involves the design of a detector with the capability of in-situ reverification of nuclear material inventory inside dry storage casks (both concrete and metal), in the event of the loss of continuity of knowledge and/or other reasons. Recently, this project had a cost over run without delivery of the project scope. Spending on this project has been frozen. LANL is awaiting the release of an IAEA user requirements document rom Alain Lebrun. Once received, LANL will respond to the IAEA user requirements document and generate a proposal, as specified by ISPO,
A.262	Coordinated Experts' Meeting on Noble G Monitoring and Sampling [JNT USA A 1494 / J. Whichello]	as			or completion of this task.
	[entropy, vertical of the content of	BNL/ES&T	\$25,000.00	\$23,722.00	
		PNNL	\$117,194.00	\$85,382.68	BNL's involvement is complete.
			¥,.	1 (2 s	Fed Bowyer (PNNL) is working to finalize the IAEA report from the Noble Gas Monitoring and Sampling technical meeting held in late September 2005 in Vienna. Dr. Bowyer worked with the IAEA and other member state experts to finalize the meeting report. A final version is expected by the end of the FY 06.
A.263	Traceability of DA Measurements - Provis Certified Reference Materials [USA A 1496 / S. Balsley]	ion of NBL			
	[Sex. A look of Euroloy]	NBL	\$103,000.00	\$34,029.00	
				fi s h	NBL committed to supply the Safeguards Analytical Laboratory with ifteen units of plutonium metal standard CRM 126A. Currently, these standards are stored at LANL. NBL and LANL are working together to have the units shipped directly from LANL to the IAEA, due to the stand down of NBL plutonium operations.
A.264	Analytical Quality Control - Participation of SME Programme [USA A 1497 / S. Balsley]	of SAL in NBL			
	£	NBL	\$25,000.00	\$21,331.75	
				e N ii	NBL received the measurement data from the IAEA in early April. NBL evaluated the data and provided the results to the IAEA in late May. NBL will host the Measurement Evaluation Meeting at the INMM meeting in July, to discuss data received during the year and the continuing

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participation of the IAEA in this program.

	Title				
TaskID A.265	Subtas [Agency# / Task Officer] Environmental Sampling Evaluation Support [USA A 1498 / W. Fuhr]	Organizatio	Total Budget	Total Spent	Comments
		ORNL	\$209,000.00	\$207,175.00	
				to envir Fischer propert scenari	an umbrella support task for providing technical support related conmental sampling evaluation and data interpretation. Diane submitted a draft paper to the IAEA, comparing the isotopic ies of enriched uranium produced through two enrichment os. The paper has been reviewed and finalized. It will be ted at the INMM annual conference.
A.266	Expert - Unattended and Integrated Monitorin Systems	ng			
	[USA E 1584 / M. Zendel]				
		IAEA	\$50,000.00	\$0.00	
				The ex August	pert Diana Langner will begin her assignment with the IAEA in 2006.
A.267	Development of ISOCS Self Modeling Capabi [USA A 1607 / L. Bourva]	lities			
		IAEA	\$193,000.00	\$0.00	
					oject is on hold until the IAEA places a purchase order with ra Albuquerque.
A.268	Improvement of NWAL Capabilityin Gamma Spectrometric Anlysis for U/Pu and Fission a Activation Products [/]	nd			
	171	LLNL	\$180,000.00	\$0.00	
			,,,		TS approved funding for this task on May 30, 2006. There has a activity reported for this quarter.
B.080	Training Workshop in Design Information Re the Entire Life Cycle of Research Reactors [USA B 984 / P. Rodriguez]	view for			
	[00/12/00///////////////////////////////	BNL/SAC	\$305,000.00	\$305,000.00	
				This tas	sk is on stand by.
		ORNL	\$0.00	\$0.00	
		1000	^		sk is on stand by.
	B.080.01	ISPO	\$90,200.00	\$90,200.00	als to one atoms differ
				i his tas	sk is on stand by.

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TaskID B.082	Subtas	Title [Agency# / Task Officer] Safeguards Training Course: Enrichment Tech	Organizatio hnology	Total Budget	Total Spent	Comments
		[USA B 1001 / M. Hunt]	ORNL	\$493,020.00	\$499,989.0	ORNL provided the twelfth and thirteenth sessions of Nuclear Material Safeguards for Uranium Enrichment Plants training to thirty IAEA inspectors from June 12 to 19 and from June 19 to 23, 2006. The two week-long courses were presented at IAEA Headquarters. Instructional videos and CDs containing copies of the four volume training chart books "Nuclear Material Safeguards for Uranium Enrichment Plants" (ISPO-347/R7, Parts 1 through 4) and "Uranium Enrichment Plant Characteristics - A Training Manual for the IAEA" (ORNL/TM-2005/43) were provided to the participants.
B.084		Revision of Introductory Course on Agency S	G (ICAS)			
		[USA B 1106 / H. Barroso]	Sonalysts	\$536,118.00	\$516,467.0	0
B.088		Enhanced Communication Skills [USA B 1245 / D. Liles]				This task is on stand by.
B.090	B.088.01	Workshop on Quality Assurance Techniques	Sonalysts	\$26,500.00	\$23,935.0	Initial training on enhanced communications skills was delivered twice to classes of experienced safeguards inspectors, once in April and once in May.
	B.090.02	[JNT USA B 1277 / D. Neal]	IAEA	\$180,000.00	\$0.0	There has been no activity reported for this quarter. The IAEA is renewing its contract with Stat-a-Matrix.

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TaskID B.091	Subtas [A Tra Mo	itle Agency# / Task Officer] Anining on Remote Monitoring and Unattender Conitoring SA B 1337 / P. Hypes]	Organizatio d	Total Budget	Total Spent	Comments
	B.091.03		LANL	\$273,500.00		Radiation Review Software Training - The Radiation Review course was presented from May 15 to 19, 2006, in Vienna. Many new exercises and training materials were developed for this second presentation of the course.
	B.091.03		Sonalysts	\$181,500.00		Radiation Review Software Training - The Radiation Review course was presented from May 15 to 19, 2006, in Vienna. Many new exercises and training materials were developed for this second presentation of the course.
B.093	Co	EA Participation in U.S. Sponsored Training ourses ISA B 0086 / P. Hypes]				
	B.093.05	,,	LANL	\$788,986.00	r	Advanced Plutonium Verification Techniques (APVT) - The APVT course was held from February 22 to March 3, 2006. It was attended by nine senior IAEA inspectors. Activities to clean up and move detectors back to their owner's laboratories were completed.
	B.093.06		LANL	\$1,225,748.00	i	NDA Training - The paperwork and forms necessary to bring the IAEA nspectors to LANL in August for the nondestructive assay course were completed. Other course authorization activities have begun.
	B.093.07		BIL	\$24,500.00	ţ	Expert Support to ICAS – ISPO approved this subtask in June and placed a task order with BIL to assist the IAEA with the neutron coincidence assay portion of the 54th session of ICAS. Stephanie McElhaney will travel to Vienna in August to conduct the training.
	B.093.07		LANL	\$73,100.00	\$73,100.00	Expert Support to ICAS - This task is on stand by.
	B.093.07		SRNL	\$47,000.00	\$45,065.00	, ,,

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TaskID	Title Subtas [Agency# / Task Officer]	Organizatio	Total Budget	Total Spent Comme	nts
B.094	Neutron Pulse Simulator for Training and I [USA B 1401 / P. Hypes]	esting			
	[OOA D 1401) Thypos	LANL	\$543,300.00	\$528,914.57 Progress has been made on the NPS Us user interface tab option called "Student displays showing detector setup parame have been produced and will be used in analysis of the data generated by the NF showing how the new user interface can Tables for the sample data that support generated and incorporated into the progression of the program. Documental composition according to a use been built into the program.	ters and isotopic composition conjunction with INCC for PS. An initial procedure be used has been created. The new features have been gram. An algorithm for adjusting reselected declaration date has
B.096	Workshop on Additional Protocol Activities [USA B 1415 / M. Hunt]	5			
	,	BNL/NCT	\$343,061.00	\$247,252.00 In April, BNL provided the IAEA with the declaration for the BNL site and the fictit used by twelve IAEA student inspectors complementary access and the use of n with SAIC to craft three realistic compler based on BNL's waste management site design, and construction group, and exa Brookhaven Medical Research Reactor Nuclear Power Station. BNL conducted Workshop (Complementary Access Exerting In April 12 to 16, and at BNL from Jure 12 to 16, and at BNL from Jure 12 to 16.	ious country of Freedonia, to be in June to learn and to practice nanaged access. BNL worked nentary access scenarios, laser research, magnet mple exercises at the and the former Shoreham the Additional Protocol rcise) at IAEA Headquarters
B.098	Enhanced Observational Skills [USA B 1446 / M. Hunt]				
		Sonalysts	\$258,000.00	\$253,397.00	
	B.098.02	Sonalysts	\$41,000.00	\$23,666.00 Training on enhanced observational skill classes of experienced safeguards inspering the management of the students is scheduled for delivery in July	ectors, once in April and once ervational skills for ICAS
B.099	Physical Inventory Taking Computer Based [USA B 1464 / V. Cisar]	d Training			
	(ВМІ	\$192,152.06	\$90,023.00 A report was not provided.	

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TaskID B.101	Subtas	Title [Agency# / Task Officer] Expert - Senior Instrumentation Specialist - NDA Equipment and Procedures [USA B 1418 / A. Hamilton]	Organizatio Training in	Total Budget	Total Spent Comments
			IAEA	\$230,001.01	\$270,360.79 The Radiation Review Software course was coordinated and training was provided. Additional USSP support has been requested to present the Radiation Review Software course again in September. The Headquarters portion of the NDA Techniques course scheduled for August 2006 at LANL is being developed. Preparations are proceeding for the 54th ICAS. CFE efforts have concentrated on updating and preparing the NDA portion of the ICAS, module 6. The IAEA requested that the USSP provide an instructor to help with module 6. Work is proceeding in cooperation with LANL on the Neutron Pulse Simulator, which will greatly improve the neutron training provided in ICAS and during impromptu training sessions with inspectors. Impromptu training was provided to experienced inspectors who were preparing to go on inspections. Training was coordinated and developed in cooperation with various member state support programs.
C.111		Safeguards System for Chernobyl Unit 4 [JNT USA E 1445 / A. Zatsepin]			
			BNL/NCT	\$281,000.00	\$241,687.00 Brian Boyer attended a meeting in Vienna in May. Plans for the installation of the access monitoring system were reviewed. An installation date of summer 2006 was planned.
			PNNL	\$85,943.00	\$76,162.00
			Sonalysts	\$246,000.00	\$130,320.00
					Sonalysts is providing project management support to the IAEA for the installation of the Access Point Monitoring System at Chernobyl Unit 4 (Shelter). This installation is scheduled for July-August 2006.
	C.111.01		LANL	\$60,900.00	\$51,070.39
					Instrument Assistance to the Chernobyl Shelter - There has been no activity reported for this quarter.
	C.111.02		LANL	\$50,000.00	\$30,624.23
					MiniADC Installation Support - There has been no activity reported for this quarter. The final trip for this task is expected to occur in the next quarter.
	C.111.03		IAEA	\$23,000.00	\$23,000.00
					UMS Electrical Installation Support - This subtask involves electrical work at the Chernobyl Nuclear Power Plant (ChNPP). The IAEA has a direct contract with ChNPP to perform this work. There has been no activity reported for this quarter.

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		Title				
TaskID C.112	Subtas	[Agency# / Task Officer] Consultant - Development Support for Integra Safeguards [USA C 1451 / D. Hurt]	Organizatio ted	Total Budget	Total Spent Comments	
	C.112.02	-	BNL/NCT	\$16,000.00	\$0.00	
	01112102		S. S	Ψ10,000.00	Historical Paper on Containment/Surveillance and Tim project has not begun. Brian Boyer has moved to LAN determining whether the project is still needed.	
	C.112.02		BNLCONTR	\$78,500.00	\$15,062.00	
					The consultant James Larrimore worked with the IAEA June 14 to July 4. Mr. Larrimore was asked to defer fureviewing and updating safeguards policy papers in or assistance in preparing a Secretariat discussion paper integrated safeguards approach for geological reposite technical meeting in October 2006. This work is in the Task C.118, the ASTOR (Application of Safeguards to Repositories) project, initiated in 2005 as a continuatio SAGOR Phase II. The discussion paper was drafted, it topics for discussion by the Group of Experts, general concerning the application of safeguards to spent fuel principal elements of applying integrated safeguards to Annexes were drafted on the recommendations from a Group Meeting in 1997 for traditional safeguards approcharacteristics of the geological repository projects in Sweden, on safeguards objectives and diversion scena geological repositories, and on information to be provided a geological repository. Preparation of the discussion in collaboration with the System Studies Section.	rther work on der to provide on the ries, for use at a framework of Geological of Task C.102, ncluding specific assumptions repositories, and repositories. SAGOR Advisory paches, on Finland and arios for ded by a State for
C.113		Development of Techniques to Estimate the Separative Capacity of R&D Isotopes [USA C 1476 / W. Bush]				
			BNL/NCT	\$25,000.00	\$17,237.00	
					BNL's contribution to this task is complete.	
			LANL	\$40,000.00	\$29,498.00	
			LLNL	\$55,000.00	LANL's contribution to this task is complete. \$51,094.49	
				φου,σου.σο	The report on the separative capacity of R&D isotopes completed and is being reviewed at LLNL for release to	
			ORNL	\$40,785.00	\$18,630.00	
					ORNL's contribution to this task is complete.	

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TaskID	Subtas [Agency# / Task Officer]	Organizatio	Total Budget	Total Spen	t Comments
C.114	Develop a PBMR Operational Model to Id Quantify Proliferation Indicators and Pos Diversion Scenarios [USA C 1547 / Y. Touil]				
	[OOA O 104771. Today	INL	\$40,000.00	\$35,906.0	00
			\$ 10,000.00	\$30,000.0	INL completed the detailed core isotopic modeling work required to determine whether or not safeguards could be terminated for spent PBMR fuel. A report describing the work and the conclusions was reviewed by IAEA experts, who suggested some minor changes. The suggested revisions were reviewed and accepted by INL. They were incorporated into the final report, which was published and transmitted to IAEA and ISPO. This task is complete.
C.115	Quality Management Specialist				
	[USA C 1555 / D. Neal]				
		IAEA	\$171,042.00	\$85,306.1	
					The Safeguards Department Corrective Action Procedure and Guideline has been reviewed by SGCP/PST, and is being revised to reflect comments. Input and direction for a computer-based Quality Management training program for Safeguards staff were provided to the program developers. Implementation is expected in the last quarter of 2006. A course on the Management Certificate Curriculum (MCC) was completed. The development of a continual process improvement tracking system is proceeding with technical support from SGCP/PST staff. The scope of the database is being expanded to track corrective action-related issues, as well as other Department initiatives.
C.116	Determination of Decommissioned Statu	s of Facilities			
	[USA C 1561 / Y. Touil]				
	·	BNL/NCT	\$130,000.00	\$11,615.0	00
					Brian Boyer (BNL) and Colin Carroll (Sonalysts) interviewed BNL and DOE staff at BNL about the High Flux Beam Reactor, the Brookhaven

DOE staff at BNL about the High Flux Beam Reactor, the Brookhaven Medical Research Reactor, and the Brookhaven Graphite Research Reactor decommissioning and decontamination tasks, at the end of May 2006. The IAEA has requested actual case studies of decommissioned reactors to help provide guidance on the level of safeguards activity needed to certify that a decommissioned facility is not being reconstituted and misused. Dr. Boyer presented preliminary findings to the IAEA during the week of June 12 to 16, 2006. The IAEA agreed that the study was taking a direction compatible with the IAEA's

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Title

	Title				
TaskID C.117	Subtas [Agency# / Task Officer] Expert - Enrichment Plant Safeguards [USA C 1571 / R. Fagerholm]	Organizatio	Total Budget	Total Spent	Comments
		IAEA	\$50,000.00	\$113,097.73	
				approach Netherlar with a ma documen Almelo Fi and furthe safeguare presentat Uranium entitled:	y is under development for a field test of the model safeguards for the gas centrifuge enrichment plant (GCEP) at Almelo, ands. The approach will incorporate unannounced inspections allbox system for daily operator declarations. The strategy is ted in a draft report entitled: "Safeguards Approach for the led Trial." The model approach will be continued at Almelo er applied to other GCEPs that are subject to Agency ds, after a positive evaluation of the field trial results. Two ions were prepared for the "Training Course on Safeguards at Enrichment Plants," which was held from June 12 to 23, 2006, "Gas Centrifuge Isotope Separation Technology" and ent Plant: Material Containment."
C.118	Application of Safeguards to Geological F (ASTOR), Group of Experts [JNT USA C 1611 / M. Diaz Menendez]	Repositories			
	•	ISPO	\$0.00	\$0.00	
				the ASTO	s been no activity reported for this quarter. The next meeting of OR group of experts will be in October in Vienna, in on with the IAEA Safeguards Symposium.
D.122	Systems Engineering Process for SGIT [USA D 1158 / G. Cherif]				
	D.122.01	CGE&Y	\$250,969.45	\$162,839.00	
					s been no activity reported for this quarter.
	D.122.02	BIT	\$70,000.00	\$67,868.30	
	D 422 02	IAEA	¢70,000,00		s been no activity reported for this quarter.
	D.122.03	IAEA	\$70,000.00	\$0.00 There has	s been no activity reported for this quarter.

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		Title			
TaskID D.137	Subtas	[Agency# / Task Officer] Consultants - Assistance on Information Colle and Information Systems [USA D 1126 / V. Braguine]		Total Budget	Total Spent Comments
	D.137.01		BNL	\$16,000.00	\$0.00 Allen Locke - Mr. Locke consulted with the IAEA's Information Analysis Unit for two weeks in June.
	D.137.01		BNLCONTR	\$10,000.00	\$0.00
	D.137.01		ISPO	\$73,840.00	\$48,023.00
	D.137.03		LANL	\$113,000.00	\$82,712.00 Jeff Bedell - There has been no activity reported for this quarter.
	D.137.04		LANL	\$255,000.00	\$187,344.80 Arvid Lundy - There has been no activity reported for this quarter.
	D.137.06		PNNL	\$246,000.00	\$217,462.55 Ned Wogman - Dr. Wogman consulted for two weeks in late May with SGIT. He wrote four papers. Dr. Wogman is scheduled to consult with the IAEA for two weeks in August.
	D.137.07		BNLCONTR	\$66,000.00	\$2,308.00 Joyce Van Berkel - There has been no activity reported for this quarter. Ms. Van Berkel is scheduled to consult with the IAEA for four weeks in July.
	D.137.07		SNL	\$208,962.90	\$124,624.07 Joyce van Berkel - There has been no activity reported for this quarter. Ms. Van Berkel will no longer be funded through Sandia, but will work under a contract with Brookhaven. She is scheduled to consult for four weeks in July 2006, under this new funding mechanism.
	D.137.08		LLNL	\$197,000.00	\$153,716.07 Mr. Anzelon performed a two-week consultancy with the Information Analysis Unit from 29 May to 9 June.
	D.137.09		LLNL	\$108,515.00	\$97,305.70 William Domke - There has been no activity reported for this quarter. LLNL used funds from this subtask to fund Lisa Owens Davis' work this quarter under subtask D.137.15, as agreed with ISPO.
	D.137.11		LLNL	\$159,982.27	\$86,196.33 Roger Miller - There has been no activity reported for this quarter. Mr. Miller is scheduled to consult for two weeks in July 2006.

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	Title				
TaskID	Subtas [Agency# / Task Officer] D.137.12	Organizatio LANL	Total Budget \$117,000.00	Total Spent \$75,894.17	Comments
		2.0.2	V,	F 1 S ii ii ii s s	Richard Wallace - Dr. Wallace consulted for two weeks from May 2 to 2, 2006. He conducted technical literature searches, using Web of Science and INIS, supplemented by internet searches on specific institutes and subject areas. Dr. Wallace reviewed open source information, which was collected previously by SGIT staff for relevant information. He prepared a summary report for each area, with the supporting information (papers, abstracts, web site printouts, etc.) attached. The resulting files were stored in the shared SGIT consultants folder.
	D.137.13	LLNL	\$62,500.00	\$29,969.00	
					Doug Vogt - There has been no activity reported for this quarter. Mr. logt plans to consult for two weeks in the fall.
	D.137.14	LLNL	\$62,500.00	\$60,050.42	
				: C	lim Hassberger - Mr. Hassberger consulted for two weeks from May 15 to 26, 2006, at SGIT-IIS, on the safeguards implications of certain fuel cycle research and development activities, and on safeguards mplications of nuclear trafficking activities in one region of interest.
	D.137.15	LLNL	\$0.00	\$0.00	
				2	isa Owens Davis - Ms. Davis consulted for two weeks from April 17 to 28, 2006, at SGIT-IIS, focusing on collection and analysis of an analysis of office on proliferation networks.
	D.137.17	BNLCONTR	\$11,200.00	\$0.00	
				N	Caroline Mason - There has been no activity reported for this quarter. Ms. Mason is scheduled to consult with the IAEA for two weeks in September.
	D.137.17	LANL	\$20,000.00	\$19,546.00	
					Caroline Mason - There has been no activity reported for this quarter.
	D.137.18	ISPO	\$0.00	ι	lacob Blackford - Mr. Blackford consulted with the Information Analysis Jnit for two weeks in April-May. He researched clandestine nuclear procurement networks.
	D.137.19	ORNL	\$0.00	\$0.00	
				Т	eonard Phillips - There has been no activity reported for this quarter. The funding for this subtask was redirected to Task B.082 during this quarter.
	D.137.20	ORNL	\$80,000.00	\$72,294.00	
				tı a L	lames David Snider - Dr. Snider consulted for two weeks from April 17 to 28, 2006, for the Division of Safeguards Information Technology. As an Open Source Consultant, he worked under the direction of John Lepingwell, providing technical analyses on a variety of nuclear related opics.

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	Title				
TaskID	Subtas [Agency# / Task Officer]	Organizatio	Total Budget	Total Spent	Comments
	D.137.21	PNNL	\$22,000.00	\$13,088.00	
				Winsto	n Little - There has been no activity reported for this quarter.
	D.137.22	BNL	\$35,000.00	\$35,029.00	
				Informa	m Tatavosian - Ms. Tatavosian consulted with the IAEA's ation Analysis Unit for two weeks in April. She conducted ch for the IAEA from her university, Mercyhurst College.
	D.137.22	BNLCONTR	\$3,500.00	\$4,131.00	
				the ÍAE and an	m Tatavosian - Ms. Tatavosian continued to provide assistance to EA Information Analysis Unit (IAU) with open source collection alysis from her university in the United States, Mercyhurst e. She traveled to the IAEA in April for two weeks to consult with
	D.137.22	M. Tatavosian	\$102,200.00	\$0.00	
				hire Ms a cons	m Tatavosian - In June, the SSTS approved funding for BNL to s. Tatavosian as an employee to work for one year at the IAEA as ultant to the Information Analysis Unit. She is expected to start a August.
	D.137.23	J. Essner	\$60,700.00	\$0.00	
				Mr. Ess	on Essner - In June, the SSTS approved funding for BNL to hire sner as an employee to work for six months at the IAEA as a tant to the Information Analysis Unit. He started work in July.
	D.137.23	LLNL	\$56,000.00	\$58,550.93	
				assigni source ISPO r	an Essner - Mr. Essner continued his six-month consulting ment by assisting SGIT-IIS with collection and analysis of open information on nuclear related trade and proliferation networks. eceived a request from the IAEA for a six-month extension to his ment. The SSTS approved the extension in June.
	D.137.24	LANL	\$20,000.00	\$0.00	
				LANL (Consulting - There has been no activity reported for this quarter.
	D.137.25	LLNL	\$15,000.00	\$0.00	
				The IAI during	Consulting - There has been no activity reported for this quarter. EA requested follow up research by LLNL under this subtask, consulting visits under Subtasks D.137.08 (George Anzelon) and 14 (Jim Hassberger).
	D.137.26	BNLCONTR	\$34,000.00	\$0.00	
				Sigfried May-Ju	d Hecker - Dr. Hecker consulted with the IAEA for two weeks in ne.

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TaskID D.141	Title Subtas [Agency# / Task Officer] Internship Program [USA D 1396 / A. Hamilton]	Organizatio	Total Budget	Total Spent	Comments
	D.141.05	IAEA	\$104,577.48	S p	Chris Dalton - Mr. Dalton worked on CIOSP (Common Inspection Onsite coftware Package) 2. He increased his involvement with the I3S roject. Mr. Dalton will be attending meetings with the I3S team at ANL in July.
	D.141.07	BNL/OEP	\$895,000.00	th G S p	rictoria Pratt completed her internship at the end of May. The rest of the 2005-2006 interns are continuing in their assignments. James samer and Lauren Ginsberg presented their symposium papers to the STS during the USSP Annual Review Meeting in June. They will resent their papers again at the INMM Annual Meeting in Nashville, tennessee, in July.
	D.141.08	BNL	\$22,000.00		imberly van Dyke - Ms. van Dyke completed her assignment at LANL. the is now working with SGTS-TIE. This activity is complete.
	D.141.08	BNLCONTR	\$5,000.00	1	imberly van Dyke - Ms. van Dyke will attend the INMM Annual Meeting in Nashville, Tennessee, in July and present a paper on her work at LANL. ISPO placed a contract with Ms. van Dyke through BNL for this activity.
	D.141.08	LANL	\$45,800.00	b	ANL contributed to a paper entitled: "Documenting UNARM Systems," y Kim Van Dyke and Heather Nordquist, for presentation at the annual NMM meeting in July.
	D.141.09	BNL	\$4,000.00	f V	rictoria Pratt - The SSTS approved funding at its May 17, 2006, meeting or Ms. Pratt to present a paper at the IAEA Safeguards Symposium in rienna in September. ISPO will place a contract with Ms. Pratt through NL for this activity.

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TaskID D.148	Subtas	Title [Agency# / Task Officer] Expert - Special Technology Coordinator [USA D 1443 / M. Nicholas]	Organizatio	Total Budget	Total Spent	Comments
			CFE	\$450,002.66	ti c a b v F ii tt s c a	mplementation began on link analysis and visualization software for Operations B and Operations C regarding Project n-Vision. Another raining course for link analysis users training was scheduled. Multiple organizations in the United States were visited, focusing on advanced analysis tools similar to the "n-Vision" project. Collaboration efforts are being drafted for approval by Agency management. The MCM group approved the addition of a U.S. cost free expert for the "n-Vision" project. A Junior professional officer request will be issued in the coming weeks. Subproject work using the INIS database is in progress. K2 Project staff resource limitations have slowed completion of the Interface. The project is still in the final phase. Collaborative work with the Joint Research Centre continues in open source areas, such as machine language translation, duplication removal, clustering, open source alert system (EMM), name variant and recognition software, and data visualization. A paper on "n-Vision" and an invitation to advanced analysis tools vendors are being drafted for the upcoming Safeguards Symposium.
D.149		Specialist Training for IAEA's Imagery Analy [USA B 1442 / F. Claude]	ysts			
	D.149.01		IAEA	\$8,501.00	S	SDI and GIS Training - The IAEA has deferred additional training in satellite imagery analysis until work on the satellite imagery analysis aboratory upgrade has proceeded. This subtask is on stand by.
D.150		Expert - Systems Analyst [USA D 1460 / J. Smith]				
			CFE	\$428,100.00	fi T F N n tt	Work continued on the Complementary Access 2.0 project. Feedback rom the User Interface prototypes were completed and documented. The first draft of the SSEP requirements document and the SSEP project planning document have been circulated. Components will need to be evaluated for web-based spell checking, web-based Microsoft Word document creation, and an integrated document management system to replace the existing one. Initial evaluation of hese components has begun. The work on the ISIS Reengineering Project to define a consistent User Interface is in the final stages. That and other relevant IRP projects will be used as the basis for the Complementary Access 2.0 project.

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Complementary Access 2.0 project.

		Title				
TaskID	Subtas	[Agency# / Task Officer]	Organizatio	Total Budget	Total Spent	Comments
D.151		IAEA Safeguards Information System Re-engir Project	neering	, and the second	•	
		[USA D 1461 / R. Kirkgoeze]				
			TBD	\$0.00	\$0.00	
						ask provides a mechanism for POTAS-funded support to the ISIS agineering Project. Non-POTAS support is tracked under Task?.
	D.151.01	I	LLNL	\$28,532.14	\$28,532.14	
D.152		Software, Hardware and Database Provision for Satellite Imagery Analysis Support [USA D 1477 / S. Robb]	or			
			IAEA	\$100,000.00	\$0.00	
					There	has been no activity reported for this quarter.
D.153		Junior Professional Officer for the JNFL Project [USA X 1513 / C. Creusot]	ct			
		•	IAEA	\$110,000.48	\$110,616.13	

The Rokkasho Reprocessing Plant began active testing. The management of vendor software contracts, development of small in-house applications, and review of all documents that pass through the internal I3S Change Control Board are continuing. Daily diagnostic checks and data analysis must be performed. Aquila is developing the Surveillance Review Subsystem (SURS). They delivered the Software Requirement Specification, the Software Development Plan, Database Design Document, and two GUI prototypes. All of these were reviewed and feedback was provided to the vendor. AWST is developing the Inspector Activity List Subsystem (IALS). Weekly focus meetings were conducted, where contract management and technical and I3S-specific feedback is provided. AWST has provided a Software Requirement Specification and a Software Development Plan which have been reviewed. Maintenance of Operator Declaration XML schema is an ongoing task. Revisions have been made to this schema, based on IAEA and JNFL needs. An application called the Feeder was developed for inspectors and system-administrators to retrieve data from Rokkasho and strip off any digital signatures necessary to use the raw data.

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Title

TaskID D.154	Title Subtas [Agency# / Task Officer] Expert - IAEA Safeguards Information System Re-engineering Project [USA D 1520 / J. Baute]	Organizatio 1	Total Budget	Total Spent	Comments
		IAEA	\$230,000.00	con Re- of E initi Cap initi folld Rat Sup Sys the co- late auc Mai	A activities included continued focus on initiating, improving, and strolling process performance in support of the SGIT ISIS rengineering Project-IRP. Project performance with the development Direct Measures of Quality (DMOQs) was tracked. Two major atives have evolved: to develop vendor performance measures for Degenia, and to measure overall project performance. Both atives are designed to generate monthly performance data in the Dowing areas: Customer Satisfaction, Productivity, Defect Re/Quality, Cycle Time/On-Time Delivery, and Budget/Actual results. Deport has been provided to the Safeguards Quality Management Stem (QMS) implementation activities by acting as the Lead Auditor in the internal QMS audit of the Seals Process, by ongoing participation in Seafeguards Quality Manager forum activities, and a commitment to deliver two five-day QMS Workshops and two two-Day QMS Seminars of this year. Developmental support has been provided for internal diting training materials for the training of Departmental Quality mager team members. The Quality Manager training will address the sea and responsibilities before, during, and after a quality audit.
D.155	Imagery Analyst [USA D 1519 / F. Claude]				
		IAEA	\$0.00	\$0.00 Red	cruitment for this position is on hold.
D.156	Software Development Support: LIMS for the [USA D 1523 / S. Balsley]	SAL			
		IAEA	\$55,000.00		ere has been no activity reported for this quarter. The USSP proved scope of work is complete.
D.157	Windows/Office 2003 Migration for Safeguard [USA D 1548 / R. Gronvius]	ls			
		IAEA	\$87,750.00	revi that The tasl	e IAEA delivered its procurement evaluation package to ISPO for iew and approval. ISPO reviewed the package and recommended to the SSTS approve the IAEA's selected contractor, Cap Gemini. e SSTS approved Cap Gemini. Funding approved previously for this k was sufficient for the contract. Therefore, no additional funding is approved.

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TaskID D.158	Title Subtas [Agency# / Task Officer] Expert - Design, Development and Imp Data Collection and Evaluation Softwa [USA D 1556 / R. Gaetano]		Total Budget	Total Spent	Comments
	[OOA D 1990/ IX. Gaetano]	IAEA	\$158,453.00		The expert Joseph Damico is assigned to the implementation of the Integrated Inspector Information System (I3S) at the Rokkasho Reprocessing Plant (RRP) in Japan.
D.159	Design and Definition for an Enhanced Analysis Architecture [USA D 1564 / M. Murray]	I Information			
	(east 2) as the manual 1	LLNL	\$25,749.24	\$25,749.2	4 There has been no activity reported for this quarter.
		SNL	\$14,000.00	\$11,889.12	, ,
D.160	SPRICS 2.0 [/]				There has been no activity reported for this quarter.
		CAPGEMINI	\$165,000.00		The SSTS approved this task on June 1, 2006. The IAEA selected Cap Gemini to develop the new SPRICS system. Most of the MSSPs are contributing to this project, which will benefit the IAEA and the MSSPs.
D.161	SALIMS Upgrade Project Leader [/]				
	1.1	CFE	\$200,000.00	\$0.00	The SSTS approved this task in July. Vera Kolton will fill the position.
E.119	Upgrading of GARS Review Software a	and Software			
	[USA E 1249 / B. Wishard] E.119.01	Aquila	\$110,000.00	\$48,000.00	1
		qu	ţ5,555.60	, ,	Direct Services Contract for General Advanced Review Software (GARS) Upgrades - This subtask is a IAEA direct service contract with Canberra Albuquerque to provide quick response to software upgrades for Canberra designed General Advanced Review Software (GARS) and

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2Q

related products. Canberra was tasked with two new activities under this contract: DIS-SW-8 (DCMLOG parser) and DIS-SW-9 (GARS HDIS support). Both tasks are in final Beta release. The IAEA is conducting

final testing of this Beta release, prior to final approval.

	Title				
TaskID E.122	Subtas [Agency# / Task Officer] URM Systems Standardization and Support [USA E 1274 / T. Pochet]	Organizatio	Total Budget	Total Spen	Comments
	E.122.03	LANL	\$140,000.00	\$38,457.0	0
					Performance Review Software - Work on this subtask is on hold. The IAEA has not submitted a letter request for the proposed change in scope for this subtask. ISPO is waiting for IAEA response to LANL's change of scope proposal.
	E.122.06	LANL	\$556,500.00	\$488,644.2	1
					Auxiliary Communication Device (ACD) - LANL was funded to enhance the ACD firmware to include sub-second time/date stamping and to perform testing of these upgraded ACDs produced by Aquila, prior to use with the Rokkasho safeguard system. The IAEA has contracted with Canberra Albuquerque to produce ACDs that will be used at RRP. The first fifteen ACDs produced by Canberra Albuquerque for use at RRP have been completed and were forwarded to LANL in June 2006 for testing.
	E.122.08	LANL	\$157,000.00	\$111,180.1	0
					Unattended Monitoring System Software Modifications - LANL reassigned this task to a different staff member due to a retirement. No other activity occurred during this quarter.
	E.122.11	LANL	\$121,000.00	\$85,741.1	0
					Generic Software Components for the Chernobyl Conditioning Facility - LANL reassigned this task to a different staff member due to a retirement. No other activity occurred during this quarter.
	E.122.12	LANL	\$241,077.00	\$60,279.0	0
					Decomposition of Analysis Modules - There was no work performed on this task during this quarter.
	E.122.13	LANL	\$288,000.00	\$152,298.3	0
					Control Board and Baseline Release Management and Support - This subtask was created to establish a software control board to better manage the Unattended and Remote Monitoring software product from LANL N-1. LANL initiated the Version Description Document for Baseline 2 Revision 1 (B2R1) in early March. LANL has delayed producing B2R1 until the final IAEA review is completed, so that all fives can be incorporated. The control board released Extra Software

fixes can be incorporated. The control board released Extra Software Product (ESP) 14 Revisions 1 and 2 locally at LANL to correct issues involving Multi Instrument Collect (MIC) and Ortec DSPEC instrument communications on a lower-end machine. The control board released ESP 16 to Nina Wilson of the IAEA. This ESP comprised a new windows-based MIC dump utility and a new utility to extract MiniGRAND

configuration files from the MIC State of Health text files.

TaskID	Title Subtas [Agency# / Task Officer] E.122.14	Organizatio LANL	Total Budget \$259,500.00	Total Spent \$89,430.72	Comments
			. ,	of (I: ha	ICC and ISO COM Conversion - This subtask involves the conversion IAEA Neutron Coincidence Counting (INCC) and Isotopic Review ISO) codes into component object modules (COMs). Minimal activity as occurred during this past quarter. Work will intensify upon ompletion of subtask A.247.19 (UNARM Tool COM Support for NDAR).
	E.122.15	LANL	\$55,000.00	pi so ar te hr th sy at	nattended Monitoring System (UMS) Software Support - This subtask rovides the IAEA with continuous technical support regarding UMS oftware issues, which need to be evaluated and corrected on an excelerated schedule. Several issues have been worked under the echnical support code, all of which were minor and below the twenty our per issue limit requested by SSTS/ISPO. All expenditures under his project are being tracked via the LANL TeamTrack issues tracking yetem. LANL will provide ISPO with monthly report updates, as agreed the initiation of this project. ISPO approval is required for any dividual assignment that requires more than twenty hours of effort.
	E.122.16	LANL	\$61,000.00	Se	aseline 2 Software Training - The final trip report cleared LANL ecurity review and was issued a publication number. The report was nalized and distributed to the IAEA in June 2006.
	E.122.17	LANL	\$34,000.00	tr: W de Si	dvanced Multiplicity Shift Register (AMSR) Upgrade - AMSR upgrade aining was completed at the IAEA in Vienna. An upgrade procedure as written and delivered to the IAEA. Multiple programmed chips were elivered to the IAEA for future upgrades. LANL has indicated this ubtask can be closed. ISPO will obtain IAEA concurrence prior to roject closeout.
	E.122.18	Aquila	\$32,500.00	A M di ei g pa ii	lini Analog to Digital Converter (MiniADC) Firmware Upgrade - Canberra lbuquerque has been funded to modify and document changes to the liniADC firmware. Canberra Albuquerque met with LANL in June to scuss subtask progress and map out tasks to be completed by the nd of July. LANL is creating a specific task list to augment the more eneral tasking described in the Statement of Work. Tasks were assed on to Canberra Albuquerque during the June 13 meeting and are in progress. The IAEA was scheduled to be briefed on these tasks by armes Halbig during the week of June 19, 2006.

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	Title				
TaskID	Subtas [Agency# / Task Officer]	Organizatio	Total Budget	Total Spent	
	E.122.19	SNL	\$189,000.00	\$122,055.9	IAEA Equipment Security Support - The purpose of this task is for the former CFE Keith Tolk to continue to provide equipment security technical support to the IAEA. Specific security support tasks include: Mailbox System, Authentication of Jug Passage Detectors (JPD), Plutonium Information Management System (PIMS) Ring Traffic Validator, Security Architecture for Unattended Remote Monitoring System (URMS), Security Plans for SnF Tokens, and Security Plans for SGTS Public Key Infrastructure (PKI). Dr. Tolk traveled to Vienna to discuss each of these tasks with the IAEA. He is reviewing the operational concepts and key exchange documents for the Mailbox system. Dr. Tolk has worked with the IAEA on the Authentication of JPD and PIMS Ring Traffic Validator tasks. He is working on the Security Architecture document, with a goal of producing a more concise and usable document.
E.125	Remote Monitoring and Unattended Dig Surveillance Systems [USA E 1330 / M. Aparo]	ital			
	E.125.13	LANL	\$69,000.00	\$28,499.0	0
					Optional Imaging Sensor Development Support - This subtask was placed on hold by ISPO. The scope change requested verbally by the

IAEA several months ago has not been requested formally or approved. An IAEA letter requesting re-scoping of the subtask must be transmitted to ISPO, and approved by ISPO or the SSTS, before LANL continues with any further software upgrades for the review software (iDVR) which was under development. LANL is awaiting resolution of this issue

between the IAEA and ISPO/SSTS.

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Subtas [Agency# / Task Officer]	Organizatio	Total Budget	Total Spent	
Expert - Remote Monitored Surveillance	e Systems			
Development and Implementation Coor	dination			
(Regula)				
[USA E 1350 / M. Aparo]				
	Development and Implementation Coor (Regula)	Expert - Remote Monitored Surveillance Systems Development and Implementation Coordination (Regula)	Expert - Remote Monitored Surveillance Systems Development and Implementation Coordination (Regula)	Expert - Remote Monitored Surveillance Systems Development and Implementation Coordination (Regula)

CFE \$584,700.00 \$543,027.21

Agreements on Remote Monitoring (RM) Data Sharing in Japan were reached on an automated system that would accept electronic declarations from the member state, validate the declaration, and then release the data for that facility to the Member State. Work began on this automated system. Testing and improvements to existing xDSL connections to the member state and TRO infrastructure were made, in anticipation of the transfer of large amounts of RM data. Work on the design of a wireless network was done on the RM of Spent Fuel Transfer at CANDU Reactors. The network will connect a mobile detector cabinet in the dry storage area for data transfer back to Vienna, as a means to save significant inspection efforts. Work progressed on an inspector transfer program, which would allow inspectors in the field to download DMOS and VIFM data directly from the facility cabinets to review in a local office. Specifications and sole source documents were written and submitted for procurement for the wiring of Unit 2 in Cernavoda, Romania, in anticipation of RM installation sometime next quarter. A technical meeting was held with Euratom to discuss how surveillance data could be shared, with the agreement that SGTS would be the only organization allowed to access Safeguards equipment directly in the field. All DMOS, SDIS, and VIFM units have been wired for full RM or state of health in Canada.

Comments

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Title

TaskID E.133	Title Subtas [Agency# / Task Officer] Factory Support for DIS [USA E 1108 / B. Wishard]	Organizatio	Total Budget	Total Spent	Comments
	E.133.02	Aquila	\$398,125.91	for the l. Brown of Generat (Introdu upcomir surveilla internal continue provided Gonzale	own and Anthony Gonzalez continued to provide factory support AEA's existing digital imaging surveillance (DIS) systems. Mr. continued working on review software design for the Next tion Surveillance System (NGSS). Course materials for ICAS inctory Course on Agency Safeguards) were updated for the ing course. Planning continued for the processing of GARS ance data on the SG LAN. Research to replace/upgrade the hard drives of SDIS computers continued. Mr. Gonzalez ed testing and upgrading DIS equipment for field use. He diaison support with the factory for DCM-14 upgrades. Mr. ez prepared systems and was involved in the planning for GEMINI ement and DSOS installations in EURATOM countries.
	E.133.03	Aquila	\$134,000.00	the SGC GEMINI coordina replaced DSOS a (HDIS) : 7.xx tes PIP9 ind An ALIS	nal Factory Support for DIS - Vio Popescu continued assisting DC3 in activities required to complete the task of replacing I systems with DSOS, including concept design, planning, ation, and site surveys. All available DSOS were installed as ments for GEMINI. Replacements will resume as soon as new are delivered. Hawk-SG-based Digital Imaging Surveillance system testing and authorization is ongoing, including GARS sting. Development of a modular DC-UPS and integration of the dustrial computer in a 19-inch medium-size cabinet is ongoing. S with remote small-camera-housing solution was designed and ented by Mr. Popescu in two facilities with special requirements.
	E.133.04	IAEA	\$286,000.00	with two	TS approved funding in May for the IAEA to supplement its staff of contractors from Canberra Albuquerque for twelve months and July 1, 2006.

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TaskID E.134	Subtas	Title [Agency# / Task Officer] Mobile Safeguard System for SF Transportation Chernobyl NPP to Conditioning Facility [USA E 1375 / G. Ingrao]	Organizatio on from	Total Budget	Total Spen	t Comments
			IAEA	\$55,000.00	\$55,000.0	00
	E.134.01		SNL	\$814,355.28	\$778,391.1	4
						A set of options for dealing with the contaminated equipment was prepared by SNL and submitted to ISPO and the IAEA. ISPO, the IAEA, and SNL met in Vienna on June 8 to discuss the options. It was decided to decontaminate the hardware that is needed for the next system since it could be cleaned for less than the replacement cost. The recovered equipment will be sent to Canberra Albuquerque. All remaining hardware will be disposed of at SNL.
	E.134.02	!	LANL	\$259,295.00	\$259,295.0	00
	E.134.03		Aquila	\$121,250.00	\$64,088.0	00
						ISPO and Aquila have agreed that the existing task order for Aquila's support to this project will be closed, due to questions concerning the decontamination of MMCT system number 2 at Sandia. Aquila will submit an invoice for the upgrade of one system only.
E.135		Safeguards Systems for Chernobyl SF Long T Storage (Part 3/3 of Chernobyl Transfer and Conditioning Campaign) [USA E 1376 / G. Ingrao]	Ferm Dry			
	E.135.01	-	LANL	\$3,923.00	\$3,923.0	00 This task is on stand by.

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TaskID E.137	Subtas	Title [Agency# / Task Officer] Next Generation Camera Module and Ser Surveillance Systems [JNT USA E 1437 / B. Wishard]	Organizatio ver-Based	Total Budget	Total Spent	Comments
	E.137.01		Sonalysts	\$109,666.00		Mr. Carroll participated in the NGSS Phase 1 project status meeting in April 2006 with representatives of the IAEA, the U.S. Support Program, the German Support Program, Dr. Neumann Consulting, and Canberra Albuquerque. The meeting concluded that Phase 1 development of the NGSS was completed successfully with all deliverables accepted by the IAEA.
	E.137.02		Aquila	\$160,000.00		NGSS Phase 1 - Phase 1 development of the NGSS was completed successfully on April 13, 2006. All deliverables were accepted by the IAEA. Canberra Albuquerque and Dr. Neumann Consultants are waiting for purchase orders from the IAEA. The project is on hold until they are received.
	E.137.03	3	IAEA	\$299,000.00		NGSS Phase 2 - A progress review meeting for Phase 1 was held in Vienna from April 12 to 13. Canberra Albuquerque and Dr. Neumann Consultants are waiting for purchase orders from the IAEA. The project is on hold until they are received.
E.139		Expert - Digital Image Surveillance, Unatt Monitoring System Integration and Remo Systems Engineer [USA E 1463 / M. Aparo]				
		[22.02.000]	CFE	\$354,900.00		Three failing SDIS top trays were replaced and a watch dog was added for the Lithuania Remote Monitoring Project. Equipment was prepared and shipped for the Lithuania Reactor Fuel Transfer Project. All equipment was networked. Remote monitoring in Vienna has started.

for the Lithuania Remote Monitoring Project. Equipment was prepared and shipped for the Lithuania Reactor Fuel Transfer Project. All equipment was networked. Remote monitoring in Vienna has started. Minor negotiations continue with the facility. Hot testing is scheduled. Initial testing has been completed on the PFPF GUAM system for the JMOX project. Results during a preliminary review indicate limited usage for the equipment. Drafting of several documents began, based on the facilities safeguards approach. New FPGAs were installed in the PFPF AMSRs, in an attempt to eliminate the spikes associated with fast accidentals. Testing for full remote monitoring of the PFPF DMOS system began. Authentication of several RRP systems was completed.

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	Title				
TaskID E.140	Subtas [Agency# / Task Officer] Enhancement of Cobra Fibre Optic Seal Syste [USA E 1475 / G. Weeks]	Organizatio em	Total Budget	Total Spent	Comments
		IAEA	\$446,200.00	\$344,200.00	0
					This task will improve the usability and reduce the vulnerability of the COBRA seal system (seal and verifier) used by IAEA inspectors. Phase II was completed successfully on April 13, 2006. All deliverables were accepted by the IAEA. Canberra Albuquerque has received a purchase order from the IAEA for Phase III which includes development, testing, and provision of an enhanced Cobra Fiber Optic Sealing System.
E.143	Junior Professional Officer - Engineers Supp Unattended Monitoring [USA E 1531 / M. Aparo]	ort to			
	[USA E 13317 M. Aparo]	IAEA	\$100,000.20	\$104,708.9	5
			\$100,000.E 0		SGOC2, SGTS, BNL, and Sonalysts met to review the status of the Chernobyl Shelter Project. The group identified needs for the upcoming installation trip for the Shelter Access Points, scheduled for July 2006. Remote state-of-health capabilities have been added. When the Access Point installation is complete, a meeting will convene to review past work, discuss lessons learned, and develop future plans for safeguarding Chernobyl Unit 4, sometime late in the third quarter or early in the fourth quarter of 2006. SGTS-TNS reported on the process for surveying the contaminated soil around Unit 4, in order to identify nuclear material. SAL presented results from the study of the so-called lava samples from Chernobyl Unit 4. The results agreed with estimates presented at the 7th International Conference on Facility Operations. SGOC2 announced that Giovanni Ingrao will be stepping down as Chernobyl Shelter project lead and will be replaced by Aleh Zatsepin. SGTS-TIE reported that Nina Wilson has become the point of contact for the Shelter project, since the departure of CFE James Halbig.
E.144	Ultrasonically Interrogated Metal Seal [USA E 1532 / M. Goldfarb]				
		INL	\$15,000.00	\$14,402.00	
					INL's work on this task is on stand by, pending further authorization and funding.
		PNNL	\$120,577.00	\$120,577.00	
					PNNL - The feasibility study using an acoustic method for performing an in-situ verification of the existing IAEA metal cup seal is completed. IAEA has submitted a follow-on letter request for a feasibility study of IAEA metal cup seal wire verification.

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TaskID	Title Subtas [Agency# / Task Officer]	Organizatio	Total Budget	Total Spent	Comments
E.145	VOID-3 Vulnerability Assessment [USA E 1533 / H. Undem]				
		LANL	\$296,000.00	vuli eva priv an imp pro ass	e LANL Vulnerability Assessment Team continued to explore nerability issues of the IAEA VOID-2 adhesive label seal. They aluated new candidate adhesive label seals being developed by a vate company under IAEA contract. LANL prepared and transmitted interim report with eighteen major recommendations for provements in the tamper-detection efficacy of the seal. They wided two videos demonstrating a variety of security issues sociated with the seal's use. A trip to IAEA Headquarters is planned this fall to deliver findings and recommendations.
E.146	Feasibility Study for Change Detection So Applied to Metal Seal Signatures [USA E 1534 / H. Undem]	oftware			·
		INL	\$52,000.00	\$49,005.00	
				con	e Change Detection Software (CDS) feasibility study task was npleted. This task will remain open because the IAEA has omitted a letter request for follow-on CDS work.
E.147	MMS Software Update				
	[USA E 1535 / G. Weeks]				
		SNL	\$33,000.00	\$18,003.30	
				Sys faci nev the for	s task involves the possible upgrade of the Material Management stem (MMS) software located at the K-Area Material Storage (KAMS) illity at Savannah River. SNL is exploring the possibility of writing a w, less complicated, review software package, instead of modifying existing KAMS software code. SNL will submit a proposal to ISPO the new software package option. ISPO will evaluate both options d will make a recommendation to the SSTS.
		SRNL	\$8,000.00	\$0.00	
				Ple	ase see Task E.147, contractor: SNL.

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TaskID E.148	Title Subtas [Agency# / Task Officer] Expert - Senior Sealing Systems Engineer [USA E 1545 / M. Zendel]	Organizatio CFE	Total Budget	Total Spent	
E.149	Vulnerability Assessment of the "Sign and F		\$30,430.00		The expert Halvor Undem is overseeing the VOID-3 Seals Design Contract. Press-sample runs of the four new designs for the next IAEA adhesive seal have been ordered for the Adhesive Seal Project and are expected on, or before, June 15. Formal documentation on ultrasonic approaches to metal cup seal and wire verification methods have been received. Recommendations for future work have been made. At this time, the IAEA wants to suspend all work associated with acoustic extraction of the metal seal optical signature. The metal seal project has been separated into two tasks. The four parallel in-situ signature extraction efforts have been reduced to two. A decision has been made to evaluate the feasibility of using the laser surface authentication technique to authenticate an intrinsic signature for the metal cup seal. Two efforts that include ultrasonic scanning techniques were demonstrated to the IAEA. Proof of scientific principle was established in each case. A formal report was received. The final technique under examination and evaluation is the use of Radio Frequency Identifying (RFID) tags within the metal cup seal. An in-house review and evaluation is approximately two-thirds complete. Initial indications are that RFID devices will not be suitable for IAEA sealing systems anytime soon, since commercial devices are designed primarily as robust inventory tracking systems and not secure sealing systems. PNNL has demonstrated and documented two potential methods for quantitative wire integrity examinations, including both ultrasonic and eddy current techniques. A review of efforts under the wire integrity task has been completed. It is clear that acoustic methods for wire integrity verification are not feasible at this time. However, PNNL has demonstrated and documented a promising quantitative wire integrity verification method using an eddy current technique, which the IAEA intends to pursue.

The purpose of this task is to complete an independent vulnerability assessment (VA) of the Sign and Forward System (SNFS) developed by the IAEA, with primary emphasis on the software. The SNFS will provide the IAEA with a secure means of adding authentication signatures to data files and transferring them between computers. The SNFS will be used by the IAEA at installations for remote transmission of data files from unattended cabinets to a central location. SNL has not received the SNFS software and hardware from the IAEA. The SNL VA team has been preparing for the start of the analysis by familiarizing themselves with the Cryptlib software used in the system and by purchasing and installing LabWindows, which was used to develop and compile the SNFS software.

\$179,000.00

\$51,275.45

SNL

System' (SNFS)"

[USA E 1581 / A. Alessandrello]

TaskID E.150		Title [Agency# / Task Officer] Development of a Conduit Monitoring System [/]	Organizatio	Total	Budget	Total Spent	Comments
			ORNL	\$19·	4,000.00		ORNL is developing an enhanced distributed capacitance sensor system, employing Electrical Signature Analysis (ESA) to detect tampering of IAEA conduit and cable hardware. ORNL received the IAEA cable and conduit samples in May. Deployment configurations using sensors with cables and conduits of various lengths are being developed. Work has begun on an intelligence module for the software that will enable a "learning" mode, in which the system will learn automatically to recognize benign noise sources in any installation environment. Significant progress has been made with respect to identifying the location within a conduit which may have been affected during a tampering event.
E.151		Vulnerability Assessment of the Tamper Indica	ating Foil				
		[USA E 1608 / G. Weeks]	SNL	\$79	9,000.00		The purpose of this task is to complete an independent vulnerability assessment (VA) of the tamper indicating foil proposed for all newly developed safeguards field equipment used by all IAEA Operations Divisions. A new nondisclosure agreement has been prepared by SNL and signed by the German support program. Dr. Neumann will be allowed to provide parts and information for the VA, after the form is signed by SNL. The VA team will begin their assessment when the parts arrive.
E.152		New Shift Register Development [USA E 1613 / T. Pochet]					
	E.152.01		LANL	\$16.	2,000.00		This task will design and produce a new prototype shift register multiplicity board (SRMB). This new SRMB is needed by the IAEA for unattended monitoring applications as a replacement of the obsolete JSR12 and the Advanced Multiplicity Shift Register, which was never fully authorized by the IAEA due to limitations and deficiencies. The IAEA makes extensive use of the shift register coincidence units for quantitative analysis of uranium and plutonium presence in bulk material samples. The 8-bit expansion bus protocol has been researched. A document has been produced that defines the SRMB's interface. The document includes all registers used by the existing SRMB and describes the 68HC11 expansion bus timing.
	E.152.02		Aquila	\$12	7,250.00		Commercialization of New Shift Register Multiplicity Board (SRMB) - Canberra Albuquerque has been contracted by ISPO to produce the commercialized version of the new SRMB. LANL developed the SRMB.

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TookID	Title	Ouganizatio	Total Dudost	Total Count	Comments
TaskID F.032	Subtas [Agency# / Task Officer] Consultant - Services Safeguards Issue [USA C 1134 / J. Cooley]	Organizatio es (R. Hooper)	Total Budget	Total Spent	Comments
	. ,,	IAEA	\$606,858.00	\$560,063.00	
				give Two histe INF	final presentation of the Seminar on Strengthened Safeguards was an the second week of May. There were twenty-seven participants. a papers were prepared, one on States' obligation to report on orical activities on request, and the other addressed changes in CIRC/254/Part I since 1997 and Board approval of the Additional tocol.
F.036	Fixed Term Assistant - Procurement Se [USA F 1472 / A. Hamilton]	rvices			
		IAEA	\$356,000.00	\$334,602.99	
				con Info for envi proc hard Con the con 2.0	s CFE position provides continual management of change requests, tract negotiations, and amendments for the IAEA Safeguards rmation System Re-engineering Project. Interim funding was issued the physical architecture to support development and test (partial) ironments. The IAEA has funded Cap Gemini for all but the duction environment. The IAEA will buy production environment dware and software directly. This will require Procurement Advisory mittee submittal and approval. Internal discussion is ongoing as to Phase III approach. Other Safeguards related service orders and tracts have been issued and/or released. Proposals for the SPRICS project have been evaluated and submitted to SG to request ding. The Statement of Work was revised and released.
F.037	SAL Feasibility Study Workshop [USA F 1609 / S. Balsley]				
		Sonalysts	\$86,500.00	\$33,011.00	
				IAE. Ana	n Carroll of Sonalysts Inc. travelled to the IAEA in June to interview A staff on the needs of and requirements for the Safeguards llytical Laboratory, in preparation for a workshop tentatively planned all 2006.
S.026	The Design and Development of an Orion for U.S. CFEs and IAEA Staff [USA X 943 /]	entation Course			
	[OOA X 9437]	ISPO	\$395,487.00	\$395,487.00	
		.5. 5	4550 , 101.100	Jea revi and inte the Pep deli deta	nne Anderer delivered the intern guidebook to ISPO in April. ISPO ewed the draft and gave comments to Ms. Anderer in June. ISPO Ms. Anderer agreed that comments would be incorporated into the rn guidebook. Then, the guidebook would be archived as is, since Internship Program (Task D.141) has been discontinued. Susan oper met with Ms. Anderer on June 16 in Vienna. Ms. Anderer overed the first draft of the CFE guidebook. ISPO performed a sailed review of the CFE guidebook. Comments will be returned to Ms.

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Anderer in early July.

TaskID	Title Subtas [Agency# / Task Officer]	Organizatio	Total Budget	Total Spent	Comments
S.037	ISPO Recruitment Program				
	1	ISPO	\$276,422.00	\$276,521.00	
				Si N re D R di	acob Blackford and Michele Rabatin recruited students at the ANS tudent Conference at Rensselaer Polytechnic Institute (RPI) in Troy, ew York, from March 30 to April 1, 2006. ISPO participated in a scruitment videoconference with the US Mission and the State epartment on April 25. The ISPO White Paper on Obstacles to ecruiting US Citizens for IAEA Positions was the main topic of scussion. ISPO and ANL plan to share a booth at the INMM Annual leeting, in Nashville, Tennessee, from July 16 to 20, 2006.
S.049	IAEA Travel for US Support Program Tas [USA X 1306 / A. Hamilton]	sks			
	•	IAEA	\$1,901,012.33	\$1,588,899.07	
				S	nis task provides funding to the IAEA for task related travel. The STS responds to quarterly travel projections compiled by the IAEA's upport Program Administration.
S.053	Non-Proliferation and Disarmament (NDI SG Equipment	F) Funding for			
	[USA X 1342 / A. Reynaud]	10 5 0	#2 400 020 00	#2.400.020.00	
		IAEA	\$3,106,639.00	th N fo IA	nis task was established to track the expenditure of funding provided rough the Nonproliferation and Disarmament Fund (NDF) in 2000. The IDF office approved funding in 2000 for the procurement of equipment or the geospatial laboratory and digital image surveillance. ISPO, the IEA, and the State Department's NDF office are working together to spend the remaining funding and to close out this account.
S.057	USVC Funding in 2001 for SG Equipmen [USA X 1393 / A. Reynaud]	t			
	•	IAEA	\$10,154,770.44	\$9,286,741.82	
				pı	his task was established to track the IAEA's expenditure of funding rovided in the 2001 US Voluntary Contribution for the procurement of afeguards equipment.
S.060	Contracts Labor Charge [/]				
	171	ISPO	\$231,707.00	\$249,085.00	
				TI B	nis task provides funding for the labor charges that are incurred by the NL Procurement and Property Management Division, while executing ontracts and purchase orders for USSP tasks.

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TaskID S.061	Subtas	Title [Agency# / Task Officer] 2002 U.S. Voluntary Contribution for Safeguard Equipment [USA X 1490 / A. Reynaud]	Organizatio Is	Total Budget	Total Spent Comments
0.000		IOIO De constitue estara	IAEA	\$6,634,575.73	\$5,613,696.39 This task was established to track the expenditure of the 2002 US Voluntary Contribution for Safeguards equipment.
S.062		ISIS Reengineering [USA X 1491 / M. Strohmayer]			
			IAEA	\$9,069,516.67	\$358,741.00 This task was established to track US Voluntary Contributions to the ISIS Re-engineering Project (IRP).
	S.062.01		IAEA	\$612,943.33	• •
S.065		NDF 2002			NPT Accounting Software - There was no report provided for this
			IAEA	\$4,157,661.00	\$3,610,408.00 This task was established to track the expenditure of funding provided through the Nonproliferation and Disarmament Fund (NDF) in 2002. The NDF office approved funding for high priority NDA and surveillance equipment. ISPO, the IAEA, and the State Department's NDF office are working together to expend the remainder of the funding and to close out the account.
S.066		2003 USVC for Safeguards Equipment [/ A. Reynaud]			
			IAEA	\$7,700,000.00	\$3,332,939.50 This task was established to track the IAEA's expenditure of funding provided in the 2003 US Voluntary Contribution for the procurement of Safeguards equipment.
S.069		2004 USVC for Safeguards Equipment [/ A. Reynaud]	IAEA	\$4,359,600.00	\$1,996,922.98 This task was established to track the IAEA's expenditure of funding provided in the 2004 US Voluntary Contribution for the procurement of Safeguards equipment.

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	Title				
TaskID S.071	Subtas [Agency# / Task Officer] NDA Training Course Relocation [/ P.Hypes]	Organizatio	Total Budget	Total Spent Comments	
		IAEA	\$5,000.00	\$0.00	
				There has been no activity this quarter.	
		INL	\$45,000.00	\$31,017.00	
				The INL material to be used and the potential effects on Advance Plutonium Verification Training Course effectiveness were document and submitted to ISPO on April 18, 2006, completing this task. Number work is scheduled, pending further direction from ISPO.	nented
		ISPO	\$36,000.00	(\$1,060.00)	
				ISPO had conversations with the SSTS and INL about the need to establish an alternate location for NDA training.	io
		LANL	\$23,500.00	\$23,500.00	
				There has been no activity this quarter.	
		SRNL	\$4,000.00	\$0.00	
				There has been no activity this quarter.	
S.072	Technical Meeting on Novel Technolog discussion of OIOS MSSP Managemen Washington, February 24-25, 2005 [/ J. Whichello]	t Audit),			
		IAEA	\$0.00	\$0.00	
				The SSTS approved Task A.268 as an umbrella task to address I novel technology needs. This task is complete.	IAEA
S.073	2005 USVC for Safeguards Equipment [/ A. Reynaud]				
		IAEA	\$4,241,850.41	\$0.00	
				This task was established to track the IAEA's expenditure of fund provided in the 2005 US Voluntary Contribution (USVC) for the procurement of Safeguards equipment. When use of this funding reviewed and approved by the SSTS in May 2005, the SSTS ask the IAEA use remaining funding from previous years before using 2005 USVC funding. This will ensure that previous years' funding expended completely.	g was ked that g the
S.074	Enrichment Technical Meeting				
	[/ J. Whichello]				
		LLNL	\$16,397.00	\$16,397.00	

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TaskID S.075	Title Subtas [Agency# / Task Officer] Safeguards Tools for the Future [/]	Organizatio	Total Budget	Total Spent	Comments
		BNL/NCT	\$11,000.00	\$9,445.00	
		INL	\$9,500.00	\$9,879.00	
		ISPO	\$17,000.00	\$0.00	
		LANL	\$20,000.00	\$19,488.00	
		LLNL	\$12,622.97	\$12,622.97	
		ORNL	\$9,908.00	\$9,908.00	
		PNNL	\$12,000.00	\$11,767.04	
		SNL	\$17,000.00	\$16,890.47	
		Sonalysts	\$103,000.00	the	nalysts completed the DVD of the October 2006 Safeguards Tools of Future Workshop. Colin Carroll will work with the IAEA on the vision I strategy document in July.
S.077	Web-based ISPO Information System				
	[/]	LANL	\$100,000.00	requestear transcription to the control of the cont	NL visited BNL for four days in late April to develop the user uirements for the ISPO Information System (IIS). The development m was able to plot the business processes of the ISPO office and to islate those processes into information flows and system uirements. Upon return to LANL, they developed user requirements I example forms for each of the nine modules of the system. The requirements document was sent to ISPO for review, changes were agested, questions were addressed, and the first draft was compiled to user requirements document was finalized and submitted to ISPO June 30. LANL provided Al Queirolo (ISPO) with a presentation to be to the IAEA, detailing the benefits of the new system and the path ward. Mr. Queirolo made a presentation on the IIS to IAEA during the SP Annual Review Meeting in June. A presentation will be made to SP contractors at the USSP Contractor meeting during the INMM multiple in Nashville, Tennessee, in July.
S.078	Meeting on the Application of Laser Spe IAEA Safeguards [/]	ectrometry in			
	1.1	Univ of OK	\$6,209.00	\$0.00	

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TaskID	Title Subtas [Agency# / Task Officer]	Organizatio	Total Budget	Total Spent	Comments			
S.079	Facilitation for Sealing Systems Verification Workshop	Facilitation for Sealing Systems and Containment Verification Workshop						
	[/]							
		Sonalysts	\$77,200.00	\$0.00				

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U.S. – ISPO/IAEA EXPERTS

TASK	NAME	TITLE	START (First Contract)	END	SUPERVISOR
A.251	Halbig, James	Expert - Instrument Systems	April 2003	April 2006	Aparo
A.266	Langner, Diana	Unattended and Integrated Monitoring Systems	July 31,2006	July 30, 2008	Zendel
B.101	Hypes, Philip	Expert - Senior Instrumentation Specialist - Training in NDA Equipment and Procedures	July 4, 2005	July 3, 2007	Hamilton
C.115	McCullough, Richard	Expert - Quality Management Specialist	January 2006	January 2008	Patten
C.117	Uzzle, Michael	Expert- Enrichment Plant Safeguards	February 13, 2006	February 12, 2008	Fagerholm
D.148	Hilliard, John	Expert - Special Technology Coordinator	November 3, 2003	November 2, 2007	Nicholas
D.150	Miller, Scott	Expert - Systems Analyst	February 2, 2004	February 4, 2008	Smith
D.153	Gerrein, Gregory	JPO for the JNFL Project	July 4, 2005	July 3, 2007	Johnson
D.154	Watts, Rich	Expert - IAEA Safeguards Information Systems Re- engineering	October 2005	October 2007	Costantini
D.155	TBD	Expert - Imagery Analyst	TBD	TBD	Claude
D.158	Damico, Joseph	Expert - Design, Development and Implementation of Data Collection and Evaluation Software for RRP	January 1, 2006	July 2007	Gaetano

U.S. – ISPO/IAEA EXPERTS (Cont'd)

TASK	NAME	TITLE	START (First Contract)	END	SUPERVISOR	
E.127	Regula, James	Expert - Remote Monitored Surveillance Systems Development and Implementation Coordination	May 13, 2002	May 12, 2008	Aparo	_
E.139	ReFalo, Lee	Expert - Digital Image Surveillance, Unattended Monitoring System Integration, and Remote Monitoring Systems Engineer	April 11, 2004	July 10, 2007	Aparo	
E.143	Wilson, Nina	JPO - Engineers Support to Unattended Monitoring	July 12, 2005	July 11, 2007	Aparo	
E.148	Undem, Halvor	Expert - Senior Sealing Systems Engineer	February 1, 2006	January 31, 2008	Zendel	
F.36	Beauparlant, Phil	Fixed Term Assistant - Procurement Services	July 1, 2004	July 1, 2007	Hessling	

LIST OF POTAS LABORATORY REPRESENTATIVES

ACRONYMN	ORGANIZATION	CONTACT	TELEPHONE #
ANL	Argonne National Laboratory	Charles Roche	630-252-3432
BNL	BNL - Nonproliferation and Counter Terrorism	Brian Boyer	631-344-3370
EML	Environmental Monitoring Laboratory	Paul Goldhagen	212-620-3645
INL	Idaho National Laboratory	Pete Wells Trond Bjornard	208-533-7152 208-526-6328*
ISPO	International Safeguards Project Office	Susan Pepper	631-344-5979
КСР	Kansas City Plant	Douglas Byron	816-997-7201
LANL	Los Alamos National Laboratory	Ken Thomas	505-667-2175
LLNL	Lawrence Livermore National Laboratory	Wayne Ruhter Mona Dreicer	925-422-5762 925-422-7588*
LMIT	Lockheed Martin Idaho Technology	John Hartwell	208-526-9366
NBL	New Brunswick Laboratory	Jon Neuhoff	630-252-2492
NNSI	Nonproliferation and National Security Institute	Kristin Kuzinski	505-845-5170 Ext. 133
ORNL	Oak Ridge National Laboratory	Diane Fischer	865-241-3116
PNNL	Pacific Northwest National Laboratory	Carrie Mathews Jennifer Tanner	509-375-6783* 509-375-6626
РТН	Protection Technology Hanford	Steven Schlegel	509-372-1495
SNL	Sandia National Laboratories	Keith Tolk	505-845-2306
SRNL	Savannah River National Laboratory	Susan Collins Al Boni	803-725-4474* 803-725-2628
STL	Special Technologies Laboratory	Steve Koppenjan	805-681-2453

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Bloodworth, Diane	D.122.02	Systems Engineering Process for SGIT	BIT, Inc.	703-295-9700 Ext. 105
Carroll, Colin	B.88 B.91 B.98 C.111 E.137	Enhanced Communication Skills Training on Remote Monitoring and Unattended Monitoring Enhanced Observational Skills Safeguards System for Chernobyl Unit 4 Next Generation Camera Module and Server-Based Surveillance Systems	Sonalysts, Inc.	860-326-3799
Dinkel, Andreas	D.160 SP.62	SPRICS 2.0 ISIS Re-engineering Project	Cap Gemini Ernst & Young	43-1-211-63-8717
Hooper, Richard	F.32	Consultant - Services Safeguards Issues	Wind River Consulting	360-573-4650
Hamilton, Bernie	B.90	Workshop on Quality Assurance Techniques	STAT-A-MATRIX	732-906-6150
Stein, Marius	E.119.01 E.133 E.134	Factory Support for GARS Factory Support for DIS Mobile Safeguard System for SF Transportation from Chernobyl NPP to Conditioning Facility	Aquila	505-828-9100 Ext. 3841
Larrimore, Jim	C.112	Consultant - Development Support for Integrated Safeguards	Private	858-509-9604
Nunn, Hannah	B.99	Physical Inventory Taking Computer Based Training	Battelle Corporate	614-424-6151
Wuester, Jan	D.146	Quality Control Verification Software for Member States Nuclear Material Accounting Reports	SAIC/AWST	43-1-586-1314